

## **METHOD AND APPARATUS FOR SCHEDULING PACKET DATA TRANSMISSIONS IN A WIRELESS COMMUNICATION SYSTEM**

### **ABSTRACT**

A method (18) for scheduling packet data transmissions in a wireless communication system wherein a per-user Priority Function (PF) (24) is based on a channel condition indicated by a Rate Request Indicator (RRI). The method also considers fairness criteria dictated by predetermined Quality of Service (QoS) requirements. In one embodiment, the rate request indicator is a Data Rate Request (DRR). In another embodiment, the rate request indicator is Carrier-to-Interference (C/I) information. In the exemplary embodiment, the base station calculates a Priority Function (PF) for the multiple mobile users. Each PF is a function of the rate request indicator and the projected throughput of a given mobile user. In one embodiment, the predicted throughput is calculated by  $T' = (T')^\alpha$ .